

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

January 19, 2012

Via E-mail
Mr. Keith Helming
Chief Financial Officer
AerCap Holdings N.V.
Stationsplein 965
1117 CE Schiphol
The Netherlands

**RE:** AerCap Holdings N.V.

Form 20-F for Year ended December 31, 2010

Filed March 23, 2011 File No. 1-33159

Dear Mr. Helming:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Rufus Decker

Rufus Decker Accounting Branch Chief